Michael U Kumke

List of Publications by Year
in descending order

98 papers	2,643 citations	249298 26 h-index	232693 48 g-index
101 all docs	101 docs citations	101 times ranked	4595 citing authors

#	Article	IF	Citations
1	Polyproline and the "spectroscopic ruler" revisited with single-molecule fluorescence. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 2754-2759.	3.3	422
2	A Nanoparticle Approach To Control the Phase Separation in Polyfluorene Photovoltaic Devices. Macromolecules, 2004, 37, 4882-4890.	2.2	144
3	Influence of Chlorination on Chromophores and Fluorophores in Humic Substances. Environmental Science & Technology, 1999, 33, 1207-1212.	4.6	121
4	Sorption of phenols to dissolved organic matter investigated by solid phase microextraction. Science of the Total Environment, 2000, 253, 63-74.	3.9	113
5	Upconversion Luminescence Properties of NaYF₄:Yb:Er Nanoparticles Codoped with Gd³⁺. Journal of Physical Chemistry C, 2015, 119, 3363-3373.	1.5	105
6	Phase Separation of Binary Blends in Polymer Nanoparticles. Small, 2007, 3, 1041-1048.	5.2	96
7	Polymer-Induced Self-Assembly of Small Organic Molecules into Ultralong Microbelts with Electronic Conductivity. Journal of the American Chemical Society, 2010, 132, 3700-3707.	6.6	88
8	Temperature Switch of LMCT Role: From Quenching to Sensitization of Europium Emission in a Zn^{II}â^'Eu^{III} Binuclear Complex. Inorganic Chemistry, 2010, 49, 2310-2315.	1.9	86
9	Nanoparticles and their influence on radionuclide mobility in deep geological formations. Applied Geochemistry, 2012, 27, 390-403.	1.4	61
10	Aqueous Solutions of Uranium(VI) as Studied by Time-Resolved Emission Spectroscopy: A Round-Robin Test. Applied Spectroscopy, 2003, 57, 1027-1038.	1.2	54
11	A transparent, flexible, ion conductive, and luminescent PMMA ionogel based on a Pt/Eu bimetallic complex and the ionic liquid [Bmim][N(Tf)2]. Journal of Materials Chemistry, 2012, 22, 8110.	6.7	54
12	Fluorescent sensors reporting the activity of ammonium transceptors in live cells. ELife, 2013, 2, e00800.	2.8	53
13	Formation of a Eu(<scp>iii</scp>) borate solid species from a weak Eu(<scp>iii</scp>) borate complex in aqueous solution. Dalton Transactions, 2014, 43, 11516-11528.	1.6	45
14	Alkaline hydrolysis of humic substances â€“ spectroscopic and chromatographic investigations. Chemosphere, 2001, 45, 1023-1031.	4.2	43
15	Spectroscopic characterization of the competitive binding of Eu(III), Ca(II), and Cu(II) to a sedimentary originated humic acid. Chemical Geology, 2009, 264, 154-161.	1.4	41
16	Fluorescence Quenching and Luminescence Sensitization in Complexes of Tb3+and Eu3+with Humic Substances. Environmental Science & Technology, 2005, 39, 9528-9533.	4.6	40
17	Combining Spectroscopic and Potentiometric Approaches to Characterize Competitive Binding to Humic Substances. Environmental Science & Technology, 2008, 42, 5094-5098.	4.6	40
18	Sorption of Pyrene to Dissolved Humic Substances and Related Model Polymers. 2. Solid-Phase Microextraction (SPME) and Fluorescence Quenching Technique (FQT) as Analytical Methods. Environmental Science & Technology, 2002, 36, 4403-4409.	4.6	38

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19	White light emission of IFP-1 by in situ co-doping of the MOF pore system with Eu³⁺and Tb³⁺. Journal of Materials Chemistry C, 2015, 3, 4623-4631.	2.7	38
20	Sensing of Mycotoxin Producing Fungi in the Processing of Grains. Food and Bioprocess Technology, 2010, 3, 908-916.	2.6	37
21	High-resolution steady-state and time-resolved luminescence studies on the complexes of Eu(III) with aromatic or aliphatic carboxylic acids. Analytica Chimica Acta, 2009, 652, 285-294.	2.6	36
22	Influence of photochemical reactions on the complexation of humic acid with europium(III). Journal of Photochemistry and Photobiology A: Chemistry, 2001, 138, 55-63.	2.0	34
23	Intramolecular deactivation processes in complexes of salicylic acid or glycolic acid with Eu(III). Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2010, 75, 1333-1340.	2.0	34
24	Tuning of the Excited-State Properties and Photovoltaic Performance in PPV-Based Polymer Blends. Journal of Physical Chemistry C, 2008, 112, 14607-14617.	1.5	33
25	Fluorescence study of drugâ€“carrier interactions in CTAB/PBS buffer model systems. Journal of Colloid and Interface Science, 2012, 377, 251-261.	5.0	31
26	Comparative Study of Time-Resolved Photoluminescence Properties of Terbium-Doped Thiosalicylic-Capped CdS and ZnS Nanocrystals. Journal of Physical Chemistry B, 2003, 107, 12153-12160.	1.2	26
27	Influence of Streptavidin on the Absorption and Fluorescence Properties of Cyanine Dyes. Bioconjugate Chemistry, 2009, 20, 576-582.	1.8	26
28	Surface mechanism of the boron adsorption on alumina in aqueous solutions. Desalination and Water Treatment, 2013, 51, 6130-6136.	1.0	25
29	Direct Spectroscopic Evidence of 8- and 9-fold Coordinated Europium(III) Species in H₂O and D₂O. Journal of Physical Chemistry A, 2010, 114, 13050-13054.	1.1	24
30	Fluorescence lifetime-based sensing of sodium by an optode. Chemical Communications, 2014, 50, 14167-14170.	2.2	23
31	Determination of aflatoxin B1 in alcoholic beverages: comparison of one- and two-photon-induced fluorescence. Analytical and Bioanalytical Chemistry, 2010, 397, 87-92.	1.9	22
32	Oxazine Dye-Conjugated DNA Oligonucleotides: FÃ¶rster Resonance Energy Transfer in View of Molecular Dyeâ€“DNA Interactions. Bioconjugate Chemistry, 2011, 22, 2546-2557.	1.8	21
33	Lifetime-Based Oxygen Sensing Properties of palladium(II) and platinum(II) meso-tetrakis(4-phenylethynyl)phenylporphyrin. Journal of Fluorescence, 2017, 27, 861-868.	1.3	21
34	Ultrasonic Approach for Formation of Erbium Oxide Nanoparticles with Variable Geometries. Langmuir, 2011, 27, 14472-14480.	1.6	19
35	Relation between exciplex formation and photovoltaic properties of PPV polymer-based blends. Solar Energy Materials and Solar Cells, 2007, 91, 411-415.	3.0	18
36	Novel Intramolecular Energy Transfer Probe for the Detection of Benzo[a]pyrene Metabolites in a Homogeneous Competitive Fluorescence Immunoassay. Journal of Physical Chemistry B, 2010, 114, 1666-1673.	1.2	18

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37	Novel Three-Color FRET Tool Box for Advanced Protein and DNA Analysis. Bioconjugate Chemistry, 2011, 22, 1852-1863.	1.8	18
38	Rapid Synthesis of Subâ€10â€…nm Hexagonal NaYF₄â€Based Upconverting Nanoparticles using Therminol^{Â®}â€…66. ChemistryOpen, 2018, 7, 159-168.	0.9	18
39	Energy Transfer between Tm-Doped Upconverting Nanoparticles and a Small Organic Dye with Large Stokes Shift. Biosensors, 2019, 9, 9.	2.3	18
40	Toward sensitive, quantitative point-of-care testing (POCT) of protein markers: miniaturization of a homogeneous time-resolved fluoroimmunoassay for prostate-specific antigen detection. Analyst, The, 2011, 136, 1029-1035.	1.7	17
41	Miniâ€scale cultivation method enables expeditious plasmid production in Escherichia coli. Biotechnology Journal, 2014, 9, 128-136.	1.8	17
42	Monitoring the Collapse of pH-Sensitive Liposomal Nanocarriers and Environmental pH Simultaneously: A Fluorescence-Based Approach. Molecular Pharmaceutics, 2016, 13, 1608-1617.	2.3	17
43	Combination of single-molecule magnet behaviour and luminescence properties in a new series of lanthanide complexes with tris(pyrazolyl)borate and oligo(Î²-diketonate) ligands. Dalton Transactions, 2020, 49, 7774-7789.	1.6	17
44	Photophysical Characterization of a FRET System Using Tailor-Made DNA Oligonucleotide Sequences. Bioconjugate Chemistry, 2010, 21, 2347-2354.	1.8	16
45	Examples of the application of optical process and quality sensing (OPQS) to beer brewing and polyurethane foaming processes. Analytical and Bioanalytical Chemistry, 2006, 384, 1107-1112.	1.9	15
46	Dye Dynamics in Three-Color FRET Samples. Journal of Physical Chemistry B, 2012, 116, 10798-10806.	1.2	15
47	FRET Pairs with Fixed Relative Orientation of Chromophores. European Journal of Organic Chemistry, 2016, 2016, 4476-4486.	1.2	15
48	Photoluminescence Response of Terbium-Exchanged MFI-Type Materials to Si/Al Ratio, Texture, and Hydration State. Journal of Physical Chemistry B, 2006, 110, 25707-25715.	1.2	14
49	Single-fluorophore membrane transport activity sensors with dual-emission read-out. ELife, 2015, 4, e07113.	2.8	13
50	Hydrophobic Properties of Calcium-Silicate Hydrates Doped with Rare-Earth Elements. ACS Sustainable Chemistry and Engineering, 2018, 6, 14669-14678.	3.2	13
51	Tracking the Motion of Lanthanide Ions within Coreâ€“Shellâ€“Shell NaYF4 Nanocrystals via Resonance Energy Transfer. Journal of Physical Chemistry C, 2020, 124, 11229-11238.	1.5	13
52	High-Resolution Spectroscopy of Europium-Doped Ceria as a Tool To Correlate Structure and Catalytic Activity. Journal of Physical Chemistry C, 2014, 118, 23349-23360.	1.5	12
53	Rigid Rod-Based FRET Probes for Membrane Sensing Applications. Journal of Physical Chemistry B, 2016, 120, 9935-9943.	1.2	12
54	Pentanuclear Heterobimetallic 3d-4f-Complexes â€“ Structure and Luminescence. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2006, 632, 1963-1965.	0.6	11

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55	Quenching of the long-lived Ru(ii)bathophenanthroline luminescence for the detection of supramolecular interactions. Organic and Biomolecular Chemistry, 2008, 6, 2355.	1.5	11
56	Comparative Studies of Different Quinolinone Derivatives as Donors in Fluorescenceâ€Resonanceâ€Energy Transfer (FRET) â€“ Systems in Combination with a (Bathophenanthroline)ruthenium(II) Complex as Acceptor. Helvetica Chimica Acta, 2009, 92, 1933-1943.	1.0	11
57	Flash Photolysis Study of Complexes between Salicylic Acid and Lanthanide Ions in Water. Journal of Physical Chemistry A, 2012, 116, 1176-1182.	1.1	11
58	Fluorescence Line-Narrowing Spectroscopy as a Tool to Monitor Phase Transitions and Phase Separation in Efficient Nanocrystalline CexZr1â€“xO2:Eu3+ Catalyst Materials. Journal of Physical Chemistry C, 2015, 119, 10682-10692.	1.5	11
59	Insight into the Modification of Polymeric Micellar and Liposomal Nanocarriers by Fluorescein-Labeled Lipids and Uptake-Mediating Lipopeptides. Langmuir, 2016, 32, 6928-6939.	1.6	11
60	Photophysics of Ochratoxin A in Aqueous Solution. Zeitschrift Fur Naturforschung - Section B Journal of Chemical Sciences, 2008, 63, 1321-1326.	0.3	10
61	Characterization of Cell-Penetrating Lipopeptide Micelles by Spectroscopic Methods. Journal of Physical Chemistry B, 2013, 117, 14215-14225.	1.2	10
62	Optical properties of terbium-doped thiosalicylic-capped CdS nanocrystals. Chemical Physics Letters, 2003, 377, 131-136.	1.2	9
63	Architecture of Polyglutamine-containing Fibrils from Time-resolved Fluorescence Decay. Journal of Biological Chemistry, 2014, 289, 26817-26828.	1.6	9
64	Time-resolved photoluminescence analysis of distribution and migration of terbium ions in zeolites X. Physica B: Condensed Matter, 2004, 352, 358-365.	1.3	8
65	Diffusion, degradation or on-site stabilisation â€“ Identifying causes of kinetic processes involved in metalâ€“humate complexation. Applied Geochemistry, 2012, 27, 250-256.	1.4	8
66	Synthesis and Spectroscopic Characterization of Fluorophoreâ€Labeled Oligospiroketal Rods. Helvetica Chimica Acta, 2013, 96, 2046-2067.	1.0	8
67	Ultrafast Transient Absorption Spectroscopy of UO22+ and [UO2Cl]+. Journal of Physical Chemistry A, 2018, 122, 6970-6977.	1.1	8
68	FLUORESCENCE DECAY OF HUMIC SUBSTANCES. A COMPARATIVE STUDY. , 1998, , 113-122.		8
69	Spectroscopic investigations of complexes between Eu(III) and aromatic carboxylic ligands. Journal of Alloys and Compounds, 2008, 451, 361-364.	2.8	7
70	Bright or dark immune complexes of anti-TAMRA antibodies for adapted fluorescence-based bioanalysis. Analytical and Bioanalytical Chemistry, 2015, 407, 3313-3323.	1.9	7
71	Intramolecular deactivation processes of electronically excited Lanthanide(III) complexes with organic acids of low molecular weight. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2018, 191, 36-49.	2.0	7
72	Photo-isomerization of azobenzene containing surfactants induced by near-infrared light using upconversion nanoparticles as mediator. Journal of Physics Condensed Matter, 2019, 31, 125201.	0.7	7

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73	Bioinspired Confinement of Upconversion Nanoparticles for Improved Performance in Aqueous Solution. Journal of Physical Chemistry C, 2020, 124, 28623-28635.	1.5	6
74	Dehydration and rehydration effects on the photoluminescence properties of terbium-exchanged MFI-type materials. Journal of Non-Crystalline Solids, 2008, 354, 1969-1975.	1.5	5
75	Spectroscopic investigations on the effect of humic acid on the formation and solubility of secondary solid phases of Ln2(CO3)3. Journal of Rare Earths, 2011, 29, 516-521.	2.5	5
76	Verification and Biophysical Characterization of a New Threeâ€Color FÃ¶rster Resonanceâ€Energyâ€Transfer (FRET) System in DNA. Helvetica Chimica Acta, 2012, 95, 543-555.	1.0	5
77	Interdisciplinary Round-Robin Test on Molecular Spectroscopy of the U(VI) Acetate System. ACS Omega, 2019, 4, 8167-8177.	1.6	5
78	Removal of hydrophilic compounds from water with organic polymers. Chemical Engineering and Processing: Process Intensification, 2002, 41, 731-736.	1.8	4
79	Probing the physicochemical interactions of 3-hydroxy-benzo[a]pyrene with different monoclonal and recombinant antibodies by use of fluorescence line-narrowing spectroscopy. Analytical and Bioanalytical Chemistry, 2014, 406, 3387-3394.	1.9	4
80	Dynamics of metal-humate complexation equilibria as revealed by isotope exchange studies â€“ a matter of concentration and time. Geochimica Et Cosmochimica Acta, 2017, 197, 62-70.	1.6	4
81	Antibody Binding at the Liposomeâ€“Water Interface: A FRET Investigation toward a Liposome-Based Assay. ACS Omega, 2018, 3, 18109-18116.	1.6	4
82	Europium-Doped Ceriaâ€“Gadolinium Mixed Oxides: PARAFAC Analysis and High-Resolution Emission Spectroscopy under Cryogenic Conditions for Structural Analysis. Journal of Physical Chemistry A, 2020, 124, 4972-4983.	1.1	4
83	Quenching Mechanism of Uranyl(VI) by Chloride and Bromide in Aqueous and Non-Aqueous Solutions. Journal of Physical Chemistry A, 2021, 125, 4380-4389.	1.1	4
84	Influence of Gd3+ doping concentration on the properties of Na(Y,Gd)F4:Yb3+, Tm3+ upconverting nanoparticles and their long-term aging behavior. Photochemical and Photobiological Sciences, 2022, 21, 235-245.	1.6	4
85	innoFSPEC: fiber optical spectroscopy and sensing. Proceedings of SPIE, 2008, , .	0.8	3
86	Dye Tool Box for a Fluorescence Enhancement Immunoassay. Bioconjugate Chemistry, 2018, 29, 203-214.	1.8	3
87	Photophysics of Acyl- and Ester-DBD Dyes: Quadrupole-Induced Solvent Relaxation Investigated by Transient Absorption Spectroscopy. Journal of Physical Chemistry A, 2019, 123, 4717-4726.	1.1	3
88	Investigating the Sulfur â€œTwistâ€•on the Photophysics of DBD Dyes. Journal of Physical Chemistry A, 2020, 124, 4345-4353.	1.1	3
89	Spectroscopic Characterization of the Artificial Siderophore Pyridinochelin. Zeitschrift Fur Naturforschung - Section C Journal of Biosciences, 2006, 61, 741-748.	0.6	2
90	Metal Binding by Humic Substances â€“ Characterization by High-Resolution Lanthanoide Ion Probe Spectroscopy (HR-LIPS). Zeitschrift Fur Naturforschung - Section A Journal of Physical Sciences, 2009, 64, 242-250.	0.7	2

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91	Structural and photoluminescence characterization of mesoporous silicon-phosphates. Journal of Photochemistry and Photobiology A: Chemistry, 2010, 215, 17-24.	2.0	2
92	Polymerâ€“microporous host interactions probed by photoluminescence spectroscopy. Physical Chemistry Chemical Physics, 2010, 12, 3031.	1.3	2
93	pH-Sensitive Fluorescence Switching of Pyridylanthracenes: The Effect of the Isomeric Pattern. Journal of Physical Chemistry A, 2020, 124, 11017-11024.	1.1	2
94	Photophysics of â€œFloppyâ€•Dyads as Potential Biomembrane Probes. Journal of Fluorescence, 2018, 28, 1225-1237.	1.3	1
95	Lanthanide Luminescence Revealing the Phase Composition in Hydrating Cementitious Systems. ChemistryOpen, 2019, 8, 1441-1452.	0.9	1
96	Resonance Energy Transfer to Track the Motion of Lanthanide Ionsâ€”What Drives the Intermixing in Core-Shell Upconverting Nanoparticles?. Biosensors, 2021, 11, 515.	2.3	1
97	Time-resolved fluorescence measurements of cyanine dyes in biomimetic systems. Proceedings of SPIE, 2010, , .	0.8	0
98	Front Cover: FRET Pairs with Fixed Relative Orientation of Chromophores (Eur. J. Org. Chem. 26/2016). European Journal of Organic Chemistry, 2016, 2016, 4436-4436.	1.2	0